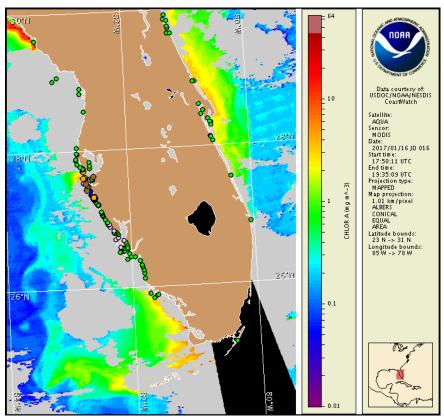


## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida Tuesday, 17 January 2017 NOAA National Ocean Service NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 12, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 8 to 13: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab\_publication/habfs\_bulletin\_guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

## **Conditions Report**

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Tuesday, January 17 through Thursday, January 19 is listed below:

**County Region:** Forecast (Duration) **Southern Pinellas:** Moderate (Tu-Th)

**Southern Pinellas, bay regions:** Moderate (Tu-Th) **Northern Manatee, bay regions:** Moderate (Tu-Th)

**Southern Manatee:** Very Low (Tu-Th)

**Southern Manatee, bay regions:** Low (Tu-Th)

Northern Sarasota: Moderate (Tu-Th)

Northern Sarasota, bay regions: Moderate (Tu-Th) Southern Charlotte, bay regions: Very Low (Tu-Th) All Other SWFL County Regions: None expected (Tu-Th)

Check <a href="http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html">http://tidesandcurrents.noaa.gov/hab/beach\_conditions.html</a> for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at <a href="http://tidesandcurrents.noaa.gov/hab/hab\_health\_info.html">http://tidesandcurrents.noaa.gov/hab/hab\_health\_info.html</a>. There have been no reports of respiratory irritation since the last bulletin. Dead fish were reported in Lee County.

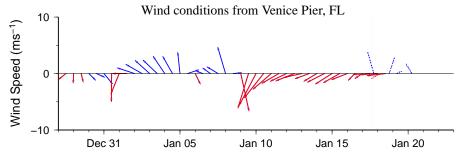
## **Analysis**

Samples collected along- and offshore the coast of southwest Florida continue to indicate the presence of *Karenia brevis* from Pinellas to Lee counties with the highest concentrations located alongshore and in the bay regions of Pinellas and Sarasota Counties (FWRI, MML, SCHD, CCENRD; 1/8-1/13). *K. brevis* is present in up to 'low b' concentrations in Manatee County and 'very low a' in the bay regions of southern Charlotte County (FWRI; 1/9-1/11). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua 1/16) is completely obscured by clouds along the coast from Pinellas to Lee counties, preventing chlorophyll analysis.

Observed winds over the weekend decreased the potential for bloom intensification at the coast. Onshore winds today through Thursday may increase the potential for respiratory irritation at the coast.

Keeney, Urízar, Ludema

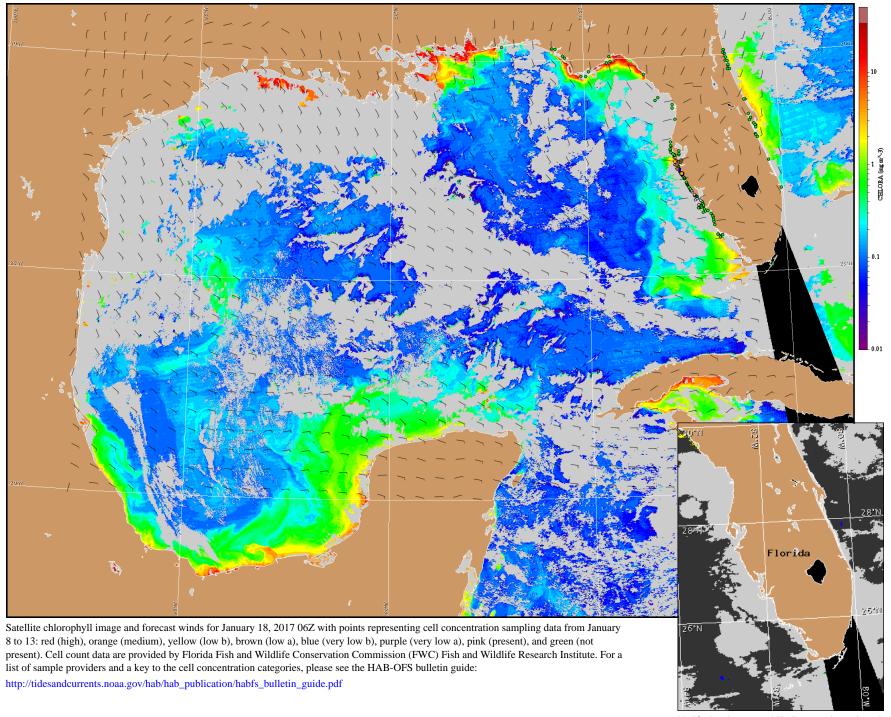


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

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## Wind Analysis

**Englewood to Tarpon Springs (Venice)**: Southeast to southwest winds (5-10 kn, 3-5 m/s) today and Wednesday. South winds (5-10 kn) Thursday.



Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).